**U.S. Army Test & Evaluation Command
(ATEC)**

Base Operations Support Cost Management/ABC Implementation Plan

14 July 2000

I. Purpose

The purpose of this plan is to establish direction for the implementation of cost management (CM)/activity based costing (ABC) in the ATEC's base operations support (BOS) business arena.

> **The ATEC purpose for Cost Management is to:** Institutionalize Cost Management in the base operations support arena throughout the ATEC, using ABC where appropriate, to drive continuous cost reduction and productivity improvement.

This BOS CM/ABC plan will outline/provide the ATEC:

II.   End-state vision
III.   Goals and objectives for CM/ABC
IV.   Implementation at White Sands Missile Range, New Mexico (ATEC prototype site)
V.   Implementation at Dugway Proving Ground, Utah
VI.   Implementation at Yuma Proving Ground, Arizona
VII.   Oros ABCPlus software requirements
VIII.   Training requirements
IX.   Points of contact

II. The End-State Vision

> **The ATEC BOS CM/ABC End-State Vision is:**
> ABC fully deployed, maintained and used for continuous process improvement at all ATEC installations in Engineering, Logistics, Morale, Welfare and Recreation, Information Technology, and other functional areas as determined by local commanders.

CM/ABC is a management tool to facilitate accomplishment of the ATEC Mission, specifically in the base operations support arena.

> **The ATEC Mission:**
> Plan, conduct, and report developmental tests, independent operational tests, experiments, and integrated continuous evaluations of Army, joint and multi-service systems and concepts in support of the combat, materiel and training development processes. Design and develop methodologies and test instrumentation; perform safety verifications; operate and modernize assigned installations, ranges and test centers.

<u>What we want to do</u> - Use management data to demonstrate high value to our customers and to better articulate our activities and costs internally and externally.

<u>How we will use the data</u> - Managers at the operational level will use it to judge the relative importance of activities, to benchmark performance, and to show improvement successes to customers. It will be used by local managers for making resource and process decisions. In general it will:
-Provide costs by activities/processes
-Provide costs of products/services
-Provide local managers cost management data to evaluate outsourcing alternatives, set reimbursable rates, and forecast expenditures
-Align resource consumption with strategic goals.

<u>How we will know if we are successful</u> - Managers will clearly state that they have the information they need to tell their cost management story and effectively manage resources.

III. Goals and Objectives for CM/ABC

The ATEC BOS Cost Management strategic goal is to: Continuously improve the efficiency and effectiveness of service delivery at ATEC installations.

Managers are under tremendous pressure in our business environment. While there is no "Magic Bullet" to be successful, there are ways to gain advantages over the challenges. One way is to prove to our customers that we are truly the best value for the products and services we provide.

Thus, we have an urgent need to implement and use strategic and disciplined business practices to improve our cost management. We must ensure that these practices are deployed at all levels in the organization.

While we already have a significant track record in performance and cost improvement, in today's environment we cannot rely only on our past record. We must continuously improve to live within resource constraints and still meet the needs of our customers in the future.

The ABC technique determines the cost to our customers by identifying and tracking the activities involved in creating products and services. Because ABC provides these activity costs, it allows us to understand how performance of work consumes resources. It also more accurately portrays product and service costs based on each customer's unique requirements. We are a process-based organization and ABC is an essential tool to understand the cost of our processes.

Specific goals and objectives include:

- Be a "Center of Excellence"
- Provide customers with "best value" products and services
- Quickly meet unique and changing customer needs
- Continuously improve efficient use of resources
- Foster teamwork and employee involvement
- -Establish better reimbursable rates
- Give visibility to value added and non-value activities at all levels in the organization

A review of the following ACSIM guidance was considered in our initial planning and was used to "scope" the level of effort and the approach best used:

> The services in the BASOPS business area include base operations (BASOPS), family programs, environmental programs, real property maintenance including minor construction, base engineering services, utilities, base communications and audio visual services. At the local level, installation activity commanders are expected to comply and apply ABC to the services in their areas.

ABC will be implemented at the following locations:

- White Sands Missile Range (WSMR), New Mexico
- Dugway Proving Ground (DPG), Utah
- Yuma Proving Ground (YPG), Arizona

Time Period	Activity Description
Jun-Dec 00	Planning & Analysis - WSMR (ATEC prototype site)
14 Jul 00	ATEC Implementation Plan to ACSIM
31 Jul-4 Aug 00	Cost & Performance Management Team CM & ABC/M Training for WSMR (6 slots) by CEAC Contractor
Aug-Dec 00	Additional ABC Training for WSMR personnel (train-the-trainer concept) at WSMR
Aug-Sep 00	ABC Training for HQ ATEC & HQ DTC personnel by CEAC Contractor
Jan-Jun 01	Model Development - WSMR

Jun-Dec 01	Planning & Analysis - DPG & YPG
Jul-Sep 01	Cost & Performance Management Team CM & ABC/M Training for DPG & YPG (6 slots) by CEAC Contractor
Jul-Dec 01	Model Implementation - WSMR
Jan 02	Operational System - WSMR
Jan-Jun 02	Model Development - DPG & YPG
Jul-Dec 02	Model Implementation - DPG & YPG
Jan 03	Operational System - DPG & YPG

The ATEC implementation schedule meets or exceeds the goals outlined by the Office of the Assistant Chief of Staff for Installation Management (ACSIM) for base operations support activity based costing implementation.

ACSIM timeframe:

14 Jul 00	MACOMs implementation plans due at ACSIM
Dec 01	Prototype ABC models deployed to pilot installations
Jul 04	MACOMs extend deployment to all installations
Dec 04	ABC implementation completed

IV. Implementation at the ATEC Prototype Site, WSMR

WSMR Implementation Goal: Refocus the installation budget-based management perspective to a CM/ABC-based management perspective and deploy ABC in designated BOS functional areas with the WSMR commander and managers actively using and updating ABC to evaluate and make resource and process improvement decisions.

WSMR will be the ATEC prototype organization to implement CM/ABC in the BASOPS functional areas. The concept of operations explained below will be reviewed during the prototype period and adjusted as appropriate for CM/ABC implementation at DPG and YPG.

Phased Approach: To maximize our success in such a large level of effort, WSMR will implement CM/ABC in a phased approach, with mandatory functions being implemented first. As experience is gained and evaluations occur, we will implement additional applications if appropriate. As an initial step, we will be visiting with other sites that have implemented CM/ABC. For example, the visit to Fort Huachuca by WSMR personnel in May 2000 is one example of the effort to gather information on implementation approaches and lessons learned. Additionally, our training will be based on the principle of "just-in time" so that we have the right people attend the right training at the right time. Therefore, initial training is planned for six personnel during 31 July - 4 August 2000 at CALIBRE

Systems, Inc. in Falls Church, Virginia. Additional training will be done at WSMR using a "train-the-trainer" concept.

Major Service Area Models: As mentioned in the preceding paragraph, the implementation approach will be to implement the mandatory functions first. Although non-mandatory, the Resources Management function will be included in the implementation of the first phase:

> Phase I (Primarily Mandatory Major Service Areas):
> - Resource Management (Non-mandatory)
> - Engineering
> - Logistics
> - Information Technology
> - Personnel and Community
>
> Phase II (Other Major Service Areas to be addressed after Phase I):
> - Health Services
> - Acquisition
> - Operations
> - Command and Staff

Functional Area Models: Each of the functional models will be incorporated into its parent Major Service Area. For example, the Transportation Services Model and the Supply Operations Model will both be part of their parent Logistics service area. A complete listing of the Service areas and the functions to be reviewed by White Sands Missile Range is provided at Appendix I.

Phase I (Mandatory Major Service Areas and Resource Management) Implementation Schedule Overview: The implementation schedule of CM/ABC, including Oros ABCPlus software, is as follows:

a. **Planing and Analysis**   **2000**
      -Develop implementation Plan   June
      -Identify Prototype Models   July
      -Planning for and analysis of models   July - December
      -Coordination with DTC and other agencies   July - December
      -Install Oros ABCPlus software   December
      -Finalized Implementation Plan   December
      -Evaluate Progress   Monthly

b. **Training**   **2000**
      - By CALIBRE Systems, Inc.   31 July - 4 August
      - Train-the-Trainer   August - December

c. **Development**   **2001**
      -Develop Prototype ABC Models   January - June

-Develop Electronic Data Links
    (SOMARDS/Oros ABC Plus interface)   January - June
-Develop Quality Assurance Plans (QASP)   January - June

d. ABC Model Implementation (Beta)   **2001**
-Beta Test ABC Models   July – December
-Apply QASP metrics measures and metrics   Monthly (Jul-Dec)
-Evaluate Progress   Monthly

e. Operational ABC System   **January 2002**

Schedule for Initial Training: Implementing CM/ABC in the BASOPS business area will occur by managing costs on a continuous improving basis primarily through the use of Oros ABCPlus Software. Initial training is planned for six WSMR personnel during 31 July - 4 August 2000 by CALIBRE Systems, Inc. in Falls Church, Virginia. Approximately 31 additional WSMR personnel will be trained in the August-December 2000 timeframe using the train-the-trainer concept. Follow-on training will be identified and accomplished on an as required basis.

Directorate	Number of Personnel
Garrison Command	8
Resources Management	11
Installation Support	8
Information Operations	5
Environmental and Safety	5
Total	37

Recommendation for the Initial Prototype Requirements: Deployment of ABC in other functional areas will be at the discretion of MACOM/MSC commanders and installation activity commanders. White Sands Missile Range will incrementally install the mandatory functions identified above and at Attachment 1, with follow-on activity being to selectively implement the non-mandatory applications as the needs arise.

Quality Assurance Plans: A Quality Assurance Plan (QAP) will be developed for each Major Service Area included in the WSMR CM/ABC Implementation Plan. Each QAP will provide an effective and systematic surveillance and evaluation method to address the inputs, outputs, management, operation, and maintenance of the CM/ABC system. The QAP can be seen at Appendix II.

V: Implementation at Dugway Proving Ground (DPG)

WSMR will be the ATEC prototype organization to implement CM/ABC in the BASOPS functional areas. Implementation progress and lessons-learned at WSMR will be closely monitored during the prototype period and adjusted as appropriate for CM/ABC implementation at DPG. DPG will implement CM/ABC in a phased approach, with mandatory functions and Resource Management being implemented first. As experience is gained and evaluations occur, DPG will implement additional applications if appropriate.

Phase I (Mandatory Major Service Areas and Resource Management) Implementation Schedule Overview: The implementation schedule of CM/ABC, including Oros ABCPlus software, is as follows:

a.	**Planing and Analysis**	**2001**
	-Develop implementation Plan	June
	-Identify Prototype Models	July
	-Planning for and analysis of models	July - December
	-Coordination with DTC and other agencies	July - December
	-Install Oros ABCPlus software	December
	-Finalized Implementation Plan	December
	-Evaluate Progress	Monthly
b.	**Training**	**2001**
	- By CALIBRE Systems, Inc.	July - September
	- Train-the-Trainer	September - December
c.	**Development**	**2002**
	-Develop Prototype ABC Models	January - June
	-Develop Electronic Data Links (SOMARDS/Oros ABC Plus interface)	January - June
	-Develop Quality Assurance Plans (QASP)	January - June
d.	**ABC Model Implementation (Beta)**	**2002**
	-Beta Test ABC Models	July – December
	-Apply QASP metrics measures and metrics	Monthly (Jul-Dec)
	-Evaluate Progress	Monthly
e.	**Operational ABC System**	**January 2003**

Schedule for Initial Training: Initial training is planned for three DPG personnel during July - September 2001 by CALIBRE Systems, Inc. in Falls Church, Virginia. Additional DPG personnel will be trained in the September-December 2001 timeframe using the train-the-trainer concept. Follow-on training will be identified and accomplished on an as required basis.

VI: Implementation at Yuma Proving Ground (YPG)

WSMR will be the ATEC prototype organization to implement CM/ABC in the BASOPS functional areas. Implementation progress and lessons-learned at WSMR will be closely monitored during the prototype period and adjusted as appropriate for CM/ABC implementation at YPG. YPG will implement CM/ABC in a phased approach, with mandatory functions and Resource Management being implemented first. As experience is gained and evaluations occur, YPG will implement additional applications if appropriate.

Phase I (Mandatory Major Service Areas and Resource Management) Implementation Schedule Overview: The implementation schedule of CM/ABC, including Oros ABCPlus software, is as follows:

a.   Planing and Analysis   **2001**
    -Develop implementation Plan   June
    -Identify Prototype Models   July
    -Planning for and analysis of models   July - December
    -Coordination with DTC and other agencies   July - December
    -Install Oros ABCPlus software   December
    -Finalized Implementation Plan   December
    -Evaluate Progress   Monthly

b.   Training   **2001**
    - By CALIBRE Systems, Inc.   July - September
    - Train-the-Trainer   September -
                                                                         December

c.   Development   **2002**
    -Develop Prototype ABC Models   January - June
    -Develop Electronic Data Links
        (SOMARDS/Oros ABC Plus interface)   January - June
    -Develop Quality Assurance Plans (QASP)   January - June

d.   ABC Model Implementation (Beta)   **2002**
    -Beta Test ABC Models   July – December
    -Apply QASP metrics measures and metrics   Monthly (Jul-Dec)
    -Evaluate Progress   Monthly

e.   Operational ABC System   **January 2003**

Schedule for Initial Training: Initial training is planned for three YPG personnel during July - September 2001 by CALIBRE Systems, Inc. in Falls Church, Virginia. Additional YPG personnel will be trained in the September-December 2001 timeframe using the train-the-trainer concept. Follow-on training will be identified and accomplished on an as required basis.

VII: Oros ABCPlus software requirements

Location	Number of seats required
HQ ATEC	2
HQ DTC	2
WSMR	63
DPG	10
YPG	10
Total	87

VIII. Training Requirements

Slots required for training provided by CALIBRE Systems, Inc. in Falls Church, Virginia

Time Period	Cost & Performance Management Team CM & ABC/M (5 days)	Executive Level Training (2 days)	Enterprise Building for Leadership (3 days)
Jul-Aug 2000	6 - WSMR		
Aug-Sep 2000		9 - (ATEC, DTC & WSMR)	11 - (ATEC, DTC & WSMR)
Jul-Sep 2001	6 - DPG & YPG		

IX. Points of Contact

Command
Address
    Primary point of contact, Office symbol
    EMAIL
    Commercial phone #, DSN phone #, FAX DSN phone #

Army, Test & Evaluation Command (ATEC)
Park Center IV, 4501 Ford Avenue, Alexandria, VA 22302-1458
    Bruce K. Doubleday, CSTE-ILE-EH
    EMAIL: DoubledayBruce@atec.army.mil
    COMM (703) 681-6239, DSN 761-6239, FAX 761-0632

Army, Developmental Test Command (DTC)
Aberdeen Proving Ground, MD 21005-5055
    Joyce L. Hoffmann, CSTE-DTC-PL
    EMAIL: hoffmannj@dtc.army.mil
    COMM (410) 278-1188, DSN 298-8715, FAX 298-8715

Army, White Sands Missile Range
White Sands Missile Range, NM 88002-5000
    Maurice Symister, CSTE-DTC-WS-RM
    EMAIL: symistem@wsmr.army.mil
    COMM (505) 678-7679, DSN 258 -7679, FAX 258-3666

Army, Dugway Proving Ground
Dugway Proving Ground, UT 84022-5000
    Nancy Stookey, CSTE-DTC-DP-DB-RM-B
    EMAIL: stookey@dugway-emh3.army.mil
    COMM (435) 831-3326, DSN 789-3326, FAX

Army, Yuma Proving Ground
Yuma Proving Ground, AZ 85365-9124
    Kathy Boring, CSTE-DTC-YP-RM
    EMAIL: kathleen.boring@yuma-exch1.army.mil
    COMM (502) 328-6739, DSN 899-6739, FAX 899-6862

Appendix I
WSMR MAJOR SERVICE AREAS
(AND ASSOCIATED FUNCTIONS)

Phase I Implementation (Primarily Mandatory Major Service Areas):

Resources Management (Non-mandatory)
        Management Analysis
        Financial Management

Engineering
        Emergency Services
        Environmental Services
        Other Engineering Services
        Real Property Management
        Housing Management

Logistics
        Laundry/Dry Cleaning
        Food Services
        Transportation Services
        Materiel Maintenance
        Supply Management
        Supply Operations

Information Technology
        Information Technology Management and Planning
        Administrative Services
        Visual Information Systems
        Communications Systems and Systems Support

Personnel and Community
        Retail Services
        Education
        Morale, Welfare, and Recreation
        Military Personnel Support
        Civilian Personnel Management

Phase II (Other Major Service Areas to be addressed after Phase I):

Health Services:
        Veterinary Medicine
        Preventive Medicine
        Dental
        Medical

Acquisition
        Contracting Administration
        Contracting

Operations
        Force Protection
        Intelligence and Security

Command and Staff
        Safety and Occupational Health
        Installation Management
        Inspector General
        Public Affairs
        Chaplain
        Staff Judge Advocate
        Provost Marshall

Appendix II
WSMR QUALITY ASSURANCE SURVEILLANCE MEASURES
(CM/ABC DATA AND INFORMATION)

Purpose: A Quality Assurance Plan (QAP) will be developed for each Major Service Area included in the WSMR CM/ABC Implementation Plan. Each QAP will provide an effective and systematic surveillance and evaluation method to address the inputs, outputs, management, operation, and maintenance of the CM/ABC system.

 - Each QAP will provide a systematic method to evaluate the activities and products, and identify a combination of surveillance methods that adequately satisfactory performance.

 - Each QAP is based on the premise the government desires to maintain a quality standard in the Major Service Areas, services, procedures, and management, operation, and maintenance of the CM/ABC system models. A major factor in the development of QAPs is the limited personnel resources and the difficulty to validate defective performance in a timely manner. It is recognized that good management and use of an adequate QAPs will allow WSMR to operate within specified performance requirements.

 - Any non-conformance with requirements is a "defect." The term "defective" is used in reference to a service output that does not meet the output's associated standard.

 - Where appropriate, methods for administering and evaluating will be by periodic surveillance or customer complaints.

Surveillance Scheduling: Each QAP will contain a surveillance schedule which includes, as a minimum, monthly reviews to be performed on a non-interference basis so as not to interfere with either the beta testing phase or the subsequent full implementation activities. The monthly surveillance schedule will be strictly adhered to.

Surveillance Procedures: Surveillance should be consistent with the monthly schedule. The Functional managers will inspect task performance by observing activities' performance, physically checking outputs, or otherwise inspecting tasks and results to determine whether or not the performance meets the standards contained in the QAP. During the month, the functional manager may receive customer complaints about the quality of the service or may observe unacceptable conditions. These complaints and observations will be noted and should reinforce the evaluation and accuracy of the sample results.

Periodic Surveillance: The Functional Area Manager, with approval from the CM/ABC Program Manager, will identify the method of periodic surveillance and select a sample size of inspection units and schedule the selected inspection units for inspection throughout the period. The Functional Area Manager will document the schedule process and use standard evaluation forms (TBD) or a locally developed form to evaluate the system performance. The Functional Area Manager will notify the appropriate personnel of the identified defect(s) and will correct the defect(s) within two days after notification. The Functional Area Manager shall maintain all documentation for file maintenance.

One Hundred Percent Inspection: During the beta-testing phase, the Functional Area Manager should perform inspections each time services are performed. The Functional Area Manager should record inspection results on the Functional Area Manager log, and note the date and time of inspection. If inspection indicates defective performance, Functional Area Manager should notify the appropriate functional personnel of the defect, and have the defect corrected. The Functional Area Manager will maintain a file of all inspection results.

Surveillance Methods: Services shall have the results of the surveillance activities documented on the appropriate surveillance activity checklist.

Documentation and Reporting Procedures: Each Functional Area Manager should keep the FM/ABC manager continuously informed of performance status. The Functional Area Manager should obtain prior approval of the inspection plans before implementing them, and provide the CM/ABC manager a copy of the inspection procedures. The Functional Area Manager is expected to keep the CM/ABC manager informed of performance status.

Types Of Surveillance Forms:
The following forms may be used by Functional Area Managers and are to be selected as the need dictates. Locally developed surveillance forms may also be used. Use of forms and the surveillance methods used must be approved by the CM/ABC Manager prior to their use. The forms are not attached hereto in this draft QAP, but will be provided by the CM/ABC Manager as the QAP plans for each functional area are developed.

(a) DA Form 5475-R, Surveillance schedule Sampling guide
(b) DA From 481-R, Tally Checklist
(c) DA Form 5476-R, Surveillance Activity Checklist
(d) DA Form 5477-R, Customer Complaint Record
(e) DA Form 5478-R, Decision Table
(f) Work statement discrepancy report

Responsibilities:

Chief Financial Officer (CFO): The Chief Financial Officer has overall responsibility for coordinating the implementation of the CM/ABC project.

Deputy CFO: The Deputy CFO has the responsibility of day to day project management of prototype development and follow-on implementation of the CM/ABC system. Additionally, he is responsible for the content and updates of the WSMR CM/ABC Implementation Plan and all QAP plans subordinate to it.

Functional Area Managers: Each Functional Area Manager is responsible for the development and implementation of the CM/ABC system within their area of control. This includes development of WSMR CM/ABC Implementation Plan for the Service Area under their control and all QAP plans subordinate to it. Functional Area Managers will coordinate all development and implementation activities with coordinated approval of the Deputy CFO.